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AMENDMENTS TO THE ABSTRACT

Please amend the Abstract as follows:

ABSTRACT:

FLUID MONITORING APPARATUS AND METHODS

This invention is generally concerned with apparatus and methods for monitoring fluids, in particular critical fluids such as lubricants, based upon evanescent wave techniques.

A sensor module, in particular for use with attenuated total internal (ATIR) reflection apparatus for optically determining the condition of a fluid, the sensor module comprising: an evanescent wave sensor; a module housing for said sensor; and an optical connector for connecting said sensor to said ATIR apparatus. Preferably the sensor comprises a tapered optical fibre with a high reflectivity mirror at one or both ends. Also attenuated total internal reflection (TIR) apparatus for the sensor.

The invention is generally concerned with apparatus and methods for monitoring fluids, in particular critical fluids such as lubricants, in particular oil, based upon evanescent wave techniques. We describe an oil sensor module for use with attenuated total internal (ATIR) reflection apparatus for optically determining the condition of the oil. The sensor module comprises an evanescent wave sensor, preferable in the form of a tapered optical fibre with a high reflectivity mirror at one or both ends; a module housing for said sensor; and an optical connector for connecting said sensor to the ATIR apparatus. Preferably the sensor module is in the form of a dipstick.